REMARKS

Claims 1-20 remain in the above-captioned application. The Examiner has found that claims 9-20 would be allowable if rewritten in independent format.

Claims 1-4 and 5-8 are rejected under 35 U.S.C. § 103(a) as unpatentable over Moriya U.S. Patent No. 5,900,549 in view of DeConde et al. U.S. Patent Application Pub. No. US 2002/0121145 A1.

The Examiner acknowledges "Moriya does not teach wherein said first signal fetching section is formed with metal having high corrosion resistance." Additionally, the Examiner acknowledges "[r]egarding claims 1 and 2 Moriya teaches a movable electrode formed by single crystal silicon but does not teach dry/wet etching for the silicon nor a specific resistance of 1.0 Ω cm or below."

Thus, the Examiner acknowledges that the principal reference does not teach 1) high-corrosion resistant fetching sections, 2) a dry/wet etched single crystal movable electrode, and 3) a specific resistance held at 1.0 Ω cm or below.

The Examiner combines the teaching of Moriya with that of DeConde et al. to supply a teaching of high-corrosion resistance fetching section. The Examiner dismisses the etched silicon movable electrode and specific resistance limitations as not shown to be "critical".

Reconsideration is respectfully requested.

The Applicants point out that prior art signal fetching sections are made from aluminum and themselves have acknowledged the <u>possibility</u> of using "high corrosive resistance" metal, such as titanium, as signal fetching sections, but point out that titanium cannot form an "excellent ohmic conjunction with silicon having a low content of

impurities." See paragraph [0013]. Simple choosing of high corrosive resistant lead material, such as suggested by DeConde et al., is not acceptable.

The Applicants, however, have discovered and disclosed that a high corrosion resistant material can be used if the silicon has been doped with impurities to provide a specific resistance of 1.0 Ω cm or less. This discovery is nowhere suggested in the cited art of record.

Moriya discloses a substrate 2 (see Figs. 17 and 18) of high resistance and a movable member 3 formed of doped single crystal silicon. With regard to the newly disclosed subject matter, Moriya discloses the movable member 23 and the surface of the substrate 22 may be doped to provide electrical conductivity. (Note that Applicants' claim the entire movable electrode is doped to provide low resistance.) Nowhere does Moriya deal with attaching leads (signal fetching sections) to the substrate for the formation of a first signal fetching section. One can only assume that the leads of aluminum are considered acceptable by Moriya since there is no suggestion that the Moriya device would be used in a corrosive environment.

DeConde et al. is directed to a device comprising a diaphragm 68 made of plastic or polymer. ¶ [0055] Indeed, DeConde et al. teach that "fabrication does not require expensive processing of silicon wafers." ¶ [0100]. With DeConde et al., the leads and electrodes are attached to the plastic or polymer device and may comprise Cr, Au, Ru, Mo, or ITO. The problem of obtaining a good ohmic conjunction between a silicon wafer and a corrosion resistant metal is simply not addressed. Hence, nothing in DeConde et al. suggests that to use corrosion resistant metal signal fetching sections with a silicon wafer, the wafer must be doped to provide a specific resistance less than 1.0 Ω cm. It may well be that metals having high-corrosion resistance can be used with plastic substrates in an application where

no electrical connector is required (plastic is non-conductive), but this is no suggestion that such materials would provide a good ohmic conjunction with a silicon substrate.

The Examiner argues that the Applicants must show "criticality." This argument is misplaced. There is no suggestion in either reference that corrosion-resistant leads can be used with silicon wafers obtaining a satisfactory ohmic connection. Hence, there is no reason why Applicants must demonstrate that 1.0 Ω cm is a critical limitation. See *In re De Lajarte*, 143 USPQ 256 at 259 (1964), wherein the court stated:

> In the total absence of evidence in the record to indicate that the amber glass disclosed by Lyle would be expected to have desirable electrical insulating properties, we can find no justification for placing the burden on applicant to conduct experiments to determine the insulating properties of the colored glass disclosed by Lyle. Although there are only very slight differences between the Lyle composition and that sought to be patented, we cannot assume that these small differences are incapable of causing a difference in properties. Appellant, in showing that his glass has basic and novel properties (at least as far as the record is concerned), would appear to have met his burden.

The principle of the *De Lajarte* case is clearly applicable here. No prior art teaches that high-corrosion resistant signal fetching sections used with silicon wafers might have desirable ohmic conjunction properties; hence, there is no basis to require Applicants to demonstrate that a good ohmic conjunction can only be obtained by doping the silicon wafer to have a specific resistances less than 1.0 Ω cm.

Moreover, the Applicants' disclosure does demonstrate the importance of this limitation with reference to Figures 8 and 9 and paragraphs 105-107.

Claims 3 and 4 are allowable for the reason that the claims from which they depend are allowable.

In view of the foregoing amendments and remarks, it is urged this case is now in condition for allowance.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON
ORKIN & HANSON, P.C.

By ________________________
David C. Hanson, Reg. No. 23,024
Attorney for Applicants
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818
Telephone: 412-471-8815
Facsimile: 412-471-4094
E-Mail: webblaw@webblaw.com